

FILE COPY

Y/TS-800

Y-12 SITE  
DOCUMENT RESPONSE CENTER

0000730

POLYCHLORINATED BIPHENYL ANNUAL REPORT .

MANAGEMENT PLAN

S. E. Rathke

January 1992

SW 11/18/92

This document has been reviewed by the  
Y-12 Plant Classification Office and has  
been determined to be

**UNCLASSIFIED**

This review does not constitute clearance  
for Public Release

Y-12 SITE  
DOCUMENT RESPONSE CENTER

#478

**Y/TS-800**

**POLYCHLORINATED BIPHENYL ANNUAL REPORT  
MANAGEMENT PLAN**

**S. E. Rathke**

**Date of Issue: January 1992**

**Prepared by the  
Oak Ridge Y-12 Plant  
managed by  
MARTIN MARIETTA ENERGY SYSTEMS, INC.  
for the  
U.S. Department of Energy  
under contract DE-AC05-84OR21400**

#### **DISCLAIMER**

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

# CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
I.	PURPOSE .....	1
II.	SCOPE .....	1
III.	DEFINITIONS .....	1
IV.	REFERENCES .....	3
V.	RESPONSIBLE INDIVIDUALS and ORGANIZATIONS .....	3
VI.	PROCEDURES .....	3
	A. Environmental Management Department Y-12 Plant Polychlorinated Biphenyl (PCB) Coordinator .....	3
	B. Waste, Transportation, Storage, and Disposal Department (WTSD) .....	6
	C. Electrical Maintenance Department .....	9
	D. Materials Department .....	11
	E. Building Coordinators .....	11
Appendix A	COVER LETTER FOR PCB ANNUAL INVENTORY REPORT .....	A-1
Appendix B	TABLE OF CONTENTS, 1989 PCB ANNUAL INVENTORY REPORT .....	B-1
Appendix C	DOCUMENT APPROVAL CYCLE OF THE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT .....	C-1
Appendix D	EXAMPLE OF WTSD ANNUAL PCB WASTE INVENTORY REPORT .....	D-1
Appendix E	EXAMPLE OF WTSD ANNUAL PCB WASTE GENERATED REPORT .....	E-1
Appendix F	EXAMPLE OF WTSD ANNUAL WASTE SHIPPED REPORT .....	F-1
Appendix G	EXAMPLE OF WTSD ANNUAL ENDING PCB WASTE INVENTORY .....	G-1
Appendix H	EXAMPLE OF ELECTRICAL MAINTENANCE DEPARTMENT ANNUAL BEGINNING PCB WASTE INVENTORY .....	H-1

Appendix I	EXAMPLE OF ELECTRICAL MAINTENANCE DEPARTMENT ANNUAL WASTE GENERATED REPORT .....	I-1
Appendix J	EXAMPLE OF ELECTRICAL MAINTENANCE DEPARTMENT ANNUAL ENDING PCB WASTE INVENTORY REPORT .....	J-1
Appendix K	EXAMPLE OF PCB TRANSFORMERS REPORT .....	K-1
Appendix L	EXAMPLES OF CERTIFICATES OF DISPOSAL .....	L-1
Appendix M	PCB SHIPMENT TELEPHONE LOG .....	M-1
Appendix N	BUILDING CONTACTS FOR PCB EQUIPMENT .....	N-1
Appendix O	LIST OF LARGE PCB CAPACITORS .....	O-1
Appendix P	MISCELLANEOUS SOURCES OF PCBs AND PCB ITEMS .....	P-1

HEALTH, SAFETY, ENVIRONMENT,  
AND ACCOUNTABILITY DIVISION

SUBJECT: POLYCHLORINATED BIPHENYL (PCB) ANNUAL REPORT MANAGEMENT PLAN

I. PURPOSE

To comply with the *Toxic Substances Control Act of 1976 (TSCA)* reporting requirements under Section 6(e) and 40 Code of Federal Regulations (CFR) Part 761, *Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions*.

II. SCOPE

Prepare the PCB Annual Report required under TSCA and 40 CFR, Part 761 for the Y-12 Plant facility.

III. DEFINITIONS

A. **Capacitor** - A device for accumulating and holding a charge of electricity and consisting of conducting surfaces separated by a dielectric. Types of capacitors are as follows:

1. **Small Capacitor** - A capacitor that contains  $< 1.36$  kg (3 lb) of dielectric fluid. The following assumptions may be used if the actual weight of the dielectric fluid is unknown. A capacitor whose total volume is  $< 1639$  cm<sup>3</sup> (100 in.<sup>3</sup>) may be considered to contain  $< 1.36$  kgs (3 lb) of dielectric fluid, and a capacitor whose total volume is  $> 3278$  cm<sup>3</sup> (200 in.<sup>3</sup>) must be considered to contain  $> 1.36$  kg (3 lb) of dielectric fluid. A capacitor whose volume is between 1639 and 3278 cm<sup>3</sup> may be considered to contain  $< 1.36$  kg (3 lb) of dielectric fluid if the total weight of the capacitor is  $< 4.08$  kg (9 lb).
2. **Large High-Voltage Capacitor** - A capacitor that contains 1.36 kg (3 lb) or more of dielectric fluid and operates at 2000 volts (ac or dc) or above.
3. **Large Low-Voltage Capacitor** - A capacitor that contains 1.36 kg (3 lb) or more of dielectric fluid and operates below 2000 volts (ac or dc).

B. **Chemical Waste Landfill** - A landfill at which protection against risk of injury to health or the environment from migration of PCBs to land, water, or the atmosphere is provided from PCBs and PCB items deposited therein by locating, engineering, and operating the landfill as specified in 40 CFR 761.75.

### III. DEFINITIONS (cont.)

- C. **Disposal** - To intentionally or accidentally discard, throw away, or otherwise complete or terminate the useful life of PCBs and PCB items. Disposal includes spills, leaks, and other uncontrolled discharges of PCBs as well as actions related to containing, transporting, destroying, degrading, decontaminating, or confining PCBs and PCB items.
- D. **Incinerator** - An engineered device using controlled flame combustion to thermally degrade PCBs and PCB items. Examples of devices used for incineration include rotary kilns, liquid injection incinerators, cement kilns, and high-temperature boilers.
- E. **Off-site** - Any location removed from the facility site (i.e., another plant, waste treatment facility, or storage facility).
- F. **PCB and PCBs** - Any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances that contains such substance.
- G. **PCB Article** - Any manufactured article, other than a PCB container, that contains PCBs and whose surface(s) has been in direct contact with PCBs. PCB article includes capacitors, transformers, electric motors, pumps, pipes, and any other manufactured item that (1) is formed to a specific shape or design during manufacture, (2) has end use function(s) dependent in whole or in part upon its shape or design during end use, and (3) has either no change of chemical composition during its end use or only those changes of composition that have no commercial purpose separate from that of the PCB article.
- H. **PCB Article Container** - Any package, can, bottle, bag, barrel, drum, tank, or other device used to contain PCB articles or PCB equipment, and whose surface(s) has not been in direct contact with PCBs.
- I. **PCB Container** - Any package, can, bottle, bag, barrel, drum, tank, or other device that contains PCBs or PCB articles and whose surface(s) has been in direct contact with PCBs.
- J. **PCB Equipment** - Any manufactured item, other than a PCB container or a PCB article container, that contains a PCB article or other PCB equipment, and includes microwave ovens, electronic equipment, and fluorescent light ballasts and fixtures.
- K. **PCB Item** - Any PCB article, PCB article container, PCB container, or PCB equipment that deliberately or unintentionally contains or has as part of it any PCB or PCBs.
- L. **PCB Transformer** - Any transformer that contains 500 ppm PCB or greater.

### III. DEFINITIONS (cont.)

- M. **PCB-Contaminated Electrical Equipment** - Any electrical equipment, including but not limited to transformers (including those used in railway locomotives and self-propelled cars), capacitors, circuit breakers, reclosers, voltage regulators, switches (including sectionalizers and motor starters), electromagnets, and cable, that contain 50 ppm or greater PCB but < 500 ppm PCB. Oil-filled electrical equipment other than circuit breakers, reclosers, and cable whose PCB concentration is unknown must be assumed to be PCB-contaminated electrical equipment.
- N. **Storage for Disposal** - Temporary storage of PCBs that have been designated for disposal.
- O. **Totally Enclosed Manner** - Any manner that will ensure no exposure of human beings or the environment to any concentration of PCBs.
- P. **Waste Oil** - Used products primarily derived from petroleum, including, but not limited to fuel oils, motor oils, gear oils, cutting oils, transmission fluids, hydraulic fluids, and dielectric fluids.

### IV. REFERENCES

- A. Public Law 940-469: Toxic Substances Control Act (TSCA), Oct. 12, 1976
- B. Title 40, Part 761: Code of Federal Regulations (CFR), *Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions*

### V. RESPONSIBLE INDIVIDUALS AND ORGANIZATIONS

- A. Environmental Management Department (EMD) - Y-12 Plant PCB Coordinator
- B. Waste Transportation, Storage, and Disposal (WTSD) Department - Supervisor of Technical Staff and Shipments
- C. Electrical Maintenance Department
- D. Materials Department - Transportation Specialist
- E. Building Coordinators

### VI. PROCEDURES

- A. Environmental Management Department (EMD) Y-12 Plant PCB Coordinator
  - 1. Notifies WTSD, Electrical Maintenance, and Materials of data necessary to complete the PCB Annual Inventory Report. This should take place no later than January 31 to ensure adequate time for data acquisition. See Fig. 1.

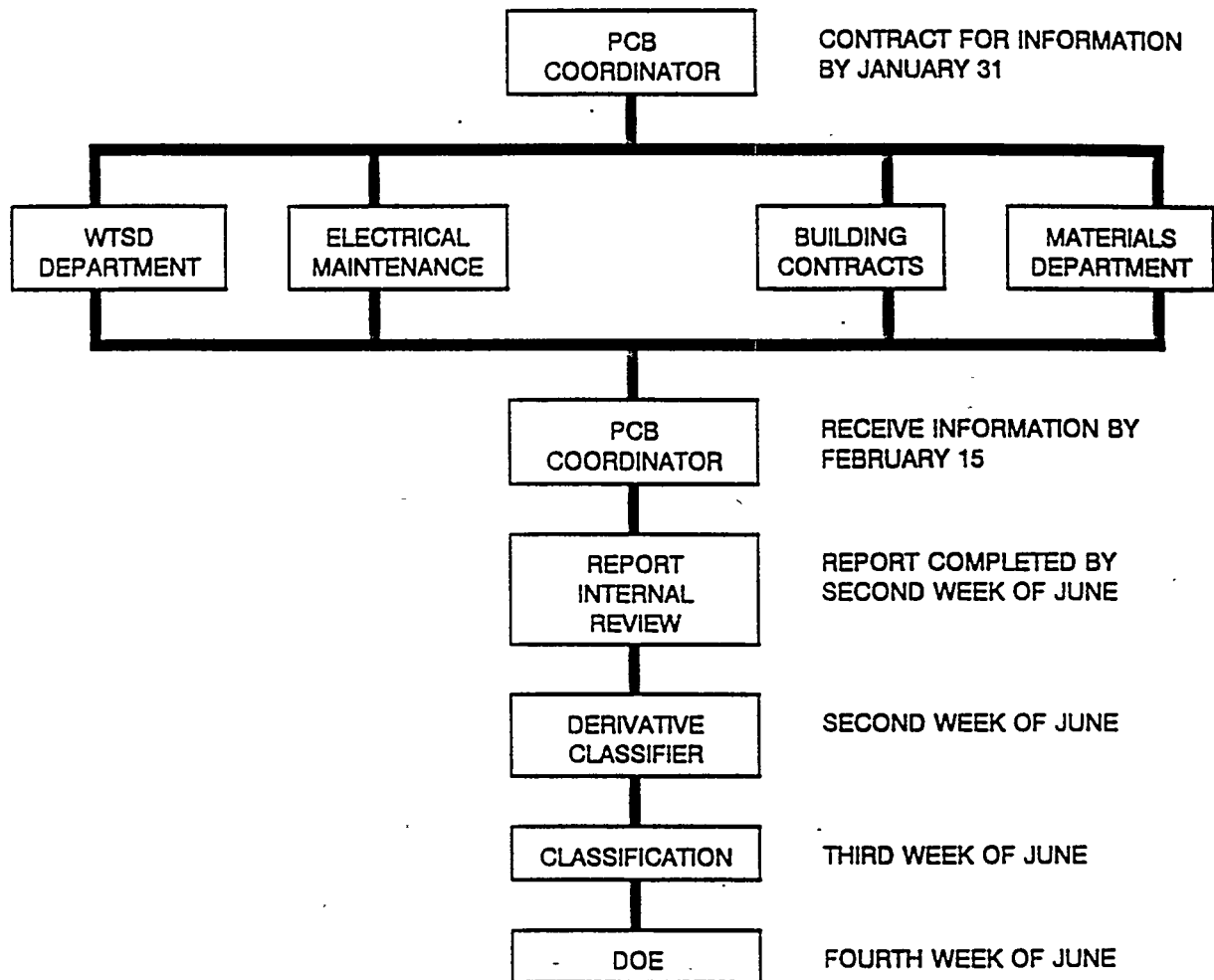


Fig. 1. Schedule for EMD Y-12 Plant PCB Coordinator.

## VI. PROCEDURES (cont.)

2. Prepares the PCB Annual Inventory Report and maintains the PCB inventory list based on data obtained from support and operation groups. All information should be received by February 15; data entry and manipulation should be initiated by March 1.
  - a. Assemble the cover letter to be attached to the document (Appendix A).
  - b. As information is gathered for the annual report, retrieve the format layout from the Table of Contents, 1990 PCB Annual Inventory Report (Appendix B) for guidance in establishing the document.
  - c. All data from WTSD will arrive in Dbase IV. Information from Electrical Maintenance, the building coordinators, and Materials will be in hard form. This information will be entered into Dbase IV to facilitate data manipulation.
  - d. Tallying large sections of the report on a calculator is to be avoided because it will create errors. Therefore, the use of Dbase IV to manipulate data will allow all calculations to take place on the computer, minimizing error.
  - e. Separate data files for each section of the report should be set up. They are as follows:
    - C.1.1 Drummed beginning waste,
    - C.1.2 Bulk beginning waste,
    - C.1.3 Miscellaneous beginning waste,
      - C.1.3.a PCB articles,
      - C.1.3.b PCB article containers,
    - C.2.1 Drummed generated waste,
    - C.2.2 Bulk generated waste,
    - C.2.3 Miscellaneous generated waste,
      - C.2.3.a PCB articles,
      - C.2.3.b PCB article containers,
    - C.3.1 Drummed shipped waste,
    - C.3.2 Bulk shipped waste,
    - C.3.3 Miscellaneous shipped waste,
      - C.3.3.a PCB articles,
      - C.3.3.b PCB article containers,
    - C.4.1 Drummed ending waste,
    - C.4.2 Bulk ending waste,
    - C.4.3 Miscellaneous ending waste,
      - C.4.3.a PCB articles, and
      - C.4.3.b PCB article containers.

The files can be named to correspond to the sections of the report (i.e., Sect. C.1.1 for drummed beginning waste). Ensure that all sections balance (i.e., the beginning total, plus the generated total, minus the shipped total, equals the ending total) as necessary before creating the final document.

## **VI. PROCEDURES (cont.)**

- f. Once the document is compiled, the review process is initiated. Sherry Robbins (ext. 6-5972) will provide a Y/TS number for the document. The report and appropriate cover letter (Appendix A) should be reviewed by a Health, Safety, Environment, and Accountability (HSEA) Division Derivative Classifier, and go through internal review per the Document Approval Cycle of the Department of Environmental Management (Appendix C) during the second week of June. During the third week, it will be reviewed by Vivienne Byrd, Classification (Building 9731, MS-8175, Ext. 4-3836), and Alan Keith, Patent office (Building 9704-2, MS-8014, Ext. 4-2229). This schedule will provide the Department of Energy the last week of June to review and submit the report to the appropriate agencies by July 1.

Internal distribution for the report is found on page 3 of Appendix A.

### **B. Waste, Transportation, Storage, and Disposal Department (WTSD)**

**NOTE:** The Y-12 Plant contact for all information required from WTSD is J. T. Foust (Building 9704-01, MS-8060, Ext. 4-1610).

1. Maintains all data bases of waste inventories and shipments. WTSD provides this information on disk to EMD once a year for the PCB Annual Inventory Report.
2. Maintains inventory of the Y-12 Plant PCB storage. Facilities are as follows:
  - a. Building 9720-09, TSCA Drummed Storage Facility.
  - b. Building 9404-07, TSCA Drummed Storage Facility.
  - c. Waste Oil Solvent Storage Facility (Facility OD-9). Three tanks contain PCBs. One tank contains strictly PCB oil, which is drained and shipped off-site regularly. The remaining two tanks contain uranium-contaminated PCB oil.
  - d. Transformer Storage Area (Facility OD-9). Contains items, such as transformers, that are in the process of being shipped off-site.
  - e. Disposal Area Remedial Action (DARA) Liquid Storage Facility.
  - f. DARA Solid Storage Facility. Contains soil removed for remedial action.
  - g. Building 9811-01 (Facilities OD-7 and OD-8). This is an approved TSCA storage facility; however, PCB-contaminated material has not been stored here for the past year. It could contain drummed material.
  - h. Oil Landfarm Soils Storage Pad. Contains soil removed for remedial action projects.
  - i. Building 9720-31 (Resource Conservation and Recovery Act Model). Containers are placed here pending sample analysis. They are then moved to the proper storage area (usually Building 9720-09 or 9404-07, if PCBs are contained in the drums).

## VI. PROCEDURES (cont.)

j. Liquid Solvent Waste Storage Facility (Facility OD-10).

3. Provides the following information for each PCB storage area listed above:

a. PCB Waste Inventory beginning January 1 (the calendar year the report begins) (Appendix D).

(1) Drummed PCB liquid and solid waste. Include the following information:

- requisition number (i.e., A29292),
- old identification number (i.e., 82-s-009),
- radiation contaminated (e.g., yes or no),
- contents description (i.e., sorball and rags),
- PCB concentration (i.e., 500 ppm),
- mass (i.e., 100 kg) (2.2015 lb = 1 kg),
- date stored (date when item was first placed into container), and
- storage location (i.e., 9404-07).

(2) Bulk PCB waste (e.g., tanks). Include the following information:

- radiation contaminated (e.g., yes or no),
- contents description (i.e., transformer oil),
- PCB concentration (i.e., 500 ppm),
- mass (i.e., 10,000 kg) (2.205 lb = 1 kg),
- date stored (date when item was first placed into tank), and
- storage location (i.e., Building 9418-09).

(3) Miscellaneous equipment - PCB articles (i.e., pipes, tanks) and article containers (i.e., capacitors and piping) must be sorted and calculated separately. These items will be included with the drummed PCB wastes. These items must be categorized into solid, liquid, article, article container, bulk liquid, and bulk solid wastes.

b. Waste generated from January 1 to January 1 (the calendar year the report ends) (Appendix E).

(1) Drummed PCB liquid and solid waste. Include the following information:

- requisition number (i.e., A29292),
- radiation contaminated (e.g., yes or no),
- contents description (i.e., sorball and rags),
- PCB concentration (i.e., 500 ppm),
- mass (i.e., 100 kg) (2.205 lb = 1 kg),
- date stored (date when item was first placed into container), and
- storage location (i.e., Building 9404-07).

## VI. PROCEDURES (cont.)

(2) Bulk PCB waste (e.g., tanks). Include the following information:

- radiation contaminated (e.g., yes or no),
- contents description (i.e., transformer oil),
- PCB concentration (i.e., 500 ppm),
- mass (i.e., 10,000 kg) (2.205 lb = 1 kg),
- date stored (date when item was first placed into tank), and
- storage location (i.e., Building 9418-09).

(3) Miscellaneous equipment - PCB articles (i.e., pipes and tanks) and article containers (i.e., capacitors and piping) must be sorted and calculated separately. These items will be included with the drummed PCB wastes. These items must be categorized into solid, liquid, article, article container, bulk liquid, and bulk solid wastes.

c. Waste shipped from January 1 to January 1 (Appendix F).

(1) Drummed PCB liquid and solid waste. Include the following information:

- requisition number (i.e., A29292),
- old identification number (i.e., 82-s-009),
- radiation contaminated (e.g., yes or no),
- contents description (i.e., sorball and rags),
- PCB concentration (i.e., 500 ppm),
- mass (i.e., 100 kg) (2.205 lb = 1 kg),
- date stored (date when item was first placed into container), and
- storage location (i.e., Building 9404-07).

(2) Bulk PCB waste (e.g., tanks). Include the following information:

- radiation contaminated (e.g., yes or no),
- contents description (i.e., transformer oil),
- PCB concentration (i.e., 500 ppm),
- mass (i.e., 10,000 kg) (2.205 lb = 1 kg),
- date stored (date when item was first placed into tank), and
- storage location (i.e., Building 9418-09).

(3) Miscellaneous equipment - PCB articles (i.e., pipes and tanks) and article containers (i.e., capacitors, piping) must be sorted and calculated separately. These items will be included with the drummed PCB wastes. These items must be categorized into solid, liquid, article, article container, bulk liquid, and bulk solid wastes.

## VI. PROCEDURES (cont.)

### d. Ending PCB Waste Inventory January 1 (Appendix G).

#### (1) Drummed PCB liquid and solid waste. Include the following information:

- requisition number (i.e., A29292),
- old identification number (i.e., 82-s-009),
- radiation contaminated (e.g., yes or no),
- contents description (i.e., sorball and rags),
- PCB concentration (i.e., 500 ppm),
- mass (i.e., 100 kg) (2.205 lb = 1 kg),
- date stored (date when item was first placed into container), and
- storage location (i.e., Building 9407-07).

#### (2) Bulk PCB waste (e.g., tanks). Include the follow information:

- radiation contaminated (e.g., yes or no),
- contents description (i.e., transformer oil),
- PCB concentration (i.e., 500 ppm),
- mass (i.e., 10,000 kg) (2.205 lb = 1 kg),
- date stored (date when item was first placed into tank), and
- storage location (i.e., Building 9418-09).

#### (3) Miscellaneous equipment - PCB articles (i.e., pipes and tanks) and article containers (i.e., capacitors and piping) must be sorted and calculated separately. These items will be included with the drummed PCB wastes. These items must be categorized into solid, liquid, article, article container, bulk liquid, and bulk solid wastes.

### 4. Maintains copies of all Off-site Shipment Manifests and Certificates of Disposal.

## C. Electrical Maintenance Department

**NOTE:** The Y-12 Plant contact for all information required from Electrical Maintenance is Mike Blalock (Building 9737, MS-8091, Ext. 4-0532).

1. Maintains an inventory of electrical equipment. This includes the number of PCB transformers and capacitors used in the high-voltage power system at the Y-12 Plant. Most of these are located outside of the buildings to which they provide power. This information is to be provided to EMD by hard copy annually for incorporation into the PCB Annual Inventory Report.
2. Maintains an inventory of the tank located in Building 9418-09 (i.e., when and how many gallons are either deposited into or removed from the tank). This facility generally is used for the storage of liquids created as a result of retrofill operations. This log is provided to EMD annually, by February 15, to be included in the PCB Annual Inventory Report.

**VI. PROCEDURES (cont.)**

**3. Provides to EMD the following information for Building 9418-09:**

**a. Beginning PCB Waste Inventory, January 1 (Appendix H).**

**(1) Bulk PCB waste. Include the following information:**

- radiation contaminated (e.g., yes or no),
- contents description (i.e., transformer oil),
- PCB concentration (i.e., 500 ppm),
- mass (i.e., 10,000 kg) (2.205 lb = 1 kg),
- date stored (date when item was first placed into tank),
- storage location (i.e., Building 9418-09).

**b. Waste generated from January 1 to January 1 (Appendix I).**

**(1) Bulk PCB waste. Include the following information:**

- radiation contaminated (e.g., yes or no),
- contents description (i.e., transformer oil),
- PCB concentration (i.e., 500 ppm),
- mass (i.e., 10,000 kg) (2.205 lb = 1 kg),
- date stored (date when item was first placed into tank), and
- storage location (i.e., Building 9418-09).

**c. Ending PCB Waste Inventory January 1 (Appendix J).**

**(1) Bulk PCB waste. Include the following information:**

- radiation contaminated (e.g., yes or no),
- contents description (i.e., transformer oil),
- PCB concentration (i.e., 500 ppm),
- mass (i.e., 10,000 kg) (2.205 lb = 1 kg),
- date stored (date when item was first placed into tank), and
- storage location (i.e., Building 9418-09).

**4. Provides information to EMD regarding PCB equipment in use in the electrical system at the Y-12 Plant.**

**NOTE:** This does not include the equipment used within each building in the Plant. This equipment is covered under Sect. E (Building Coordinators). This information is as follows:

**a. PCB transformers (500 ppm PCB or greater) in service (Appendix K).**

**b. PCB large high- and low-voltage capacitors containing 3 lb or greater of dielectric fluid.**

## **VI. PROCEDURES (cont.)**

### **c. Miscellaneous sources of PCBs and PCB items, including:**

- (1) PCBs and PCB items in containers, and**
- (2) Other items (i.e., switches and hydraulic systems).**

### **D. Materials Department**

**NOTE:** The Y-12 Plant contact for all information required from the Materials Department is Dave Foster (Building 9720-08, MS-8043, Ext. 6-2542).

- 1. Retains all original Manifests and Certificates of Disposal for January 1 to January 1 (Appendix L).**
- 2. Provides the telephone log mandated as of February 5, 1990, which requires a call to the disposer who signed the manifest within 24 h of the time that a signed manifest is received to verify that the signature is legitimate (Appendix M). This information is provided to EMD by February 15.**

### **E. Building Coordinators**

- 1. Provide to EMD a list of any PCB equipment that is located (in use, stored for reuse, or stored for disposal) within the coordinator's building. Annually (by February 15), the building contacts who have previously registered PCB- or possible PCB-contaminated equipment are contacted by telephone. The list of current contacts is in Appendix N. EMD requests information on any changes to existing data within the calendar year. This information includes the following items:**
  - a. PCB transformers (500 ppm PCB or greater),**
  - b. PCB large high- and low-voltage capacitors containing 3 lb or greater of dielectric fluid (Appendix O), and**
  - c. Miscellaneous sources of PCBs and PCB items (Appendix P), including:**
    - (1) PCBs and PCB items in containers, and**
    - (2) other items (i.e., hydraulic systems and lube oil systems).**

APPENDIX A  
COVER LETTER FOR PCB ANNUAL INVENTORY REPORT

## APPENDIX A

### COVER LETTER FOR PCB ANNUAL INVENTORY REPORT

---

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2008  
OAK RIDGE, TENNESSEE 37831

June 25, 1990

Mr. R. J. Spence  
Department of Energy, Oak Ridge Operations  
Post Office Box 2001  
Oak Ridge, Tennessee 37831

Dear Mr. Spence:

Polychlorinated Biphenyl (PCB) Annual Inventory Report for  
January 1, 1989, to February 5, 1990, at the Y-12 Plant

Enclosed is the Y-12 PCB Annual Inventory Report from January 1, 1989, to February 5, 1990, (Y/TS-667). The purpose of this report is to fulfill the record keeping requirements set forth in 40 CFR, Part 761.180(a), as specified for facilities using and storing PCBs. The document provides information for the period covering January 1, 1989, through February 5, 1990, at the Y-12 Plant concerning the type and amount of PCB equipment and waste generated, disposed of, and held in storage.

In a letter dated May 4, 1990, the Office of Pesticides and Toxic Substances of the Environmental Protection Agency (EPA) assigned the PCB Identification Number for the Y-12 Plant as TN3890090001. This number is also identified by the EPA as the Y-12 Plant Hazardous Waste Identification Number.

If you have any questions concerning the document, please contact S. E. Rathke at 4-9394.

Very truly yours,

Gordon G. Fee  
Vice President and  
Y-12 Plant Manager

GGF:SERathke:jmd

Enclosure: Y/TS-667

cc/enc: See page 2

DOE, Mr. R. J. Spence

2

June 25, 1990

cc/enc: J. K. Bailey/J. A. Olson  
W. A. Groppe/J. D. Lovette/M. S. Blalock  
J. E. Heiskell/K. D. Delius  
H. W. Hibbitts, DOE-ORO  
J. E. Keyes (2)  
T. P. A. Perry  
S. E. Rathke  
P. S. Rohwer  
C. E. Searcey  
T. S. Tison, DOE-ORO  
S. W. Wiley  
Y-12 Central Files - RC

cc: T. R. Butz/K. L. Brady/R. M. Keyser/C. C. Hill  
G. G. Fee  
M. E. Mitchell  
L. F. Willis

**APPENDIX B**

**TABLE OF CONTENTS, 1989 PCB ANNUAL INVENTORY REPORT**

## APPENDIX B

### TABLE OF CONTENTS, 1989 PCB ANNUAL INVENTORY REPORT

- i -

#### TABLE OF CONTENTS

	<u>Page</u>
EXECUTIVE SUMMARY . . . . .	1
A. INTRODUCTION . . . . .	2
STORAGE LOCATIONS OF PCB WASTE (>50 PPM) AT Y-12 . . . . .	4
B. PCBs AND PCB ITEMS IN SERVICE AS OF FEBRUARY 5, 1990. . . . .	5
B.1 PCB TRANSFORMERS. . . . .	5
B.1.1 Transformers In Service . . . . .	5
B.1.2 Transformer Carcasses Stored For Reuse . . . . .	6
B.2 PCB TRANSFORMER OIL STORED FOR REUSE . . . . .	7
B.3 LARGE PCB CAPACITORS . . . . .	8
B.4 MISCELLANEOUS SOURCES OF PCBs AND PCB ITEMS . . . . .	9
B.4.1 Hydraulic Systems . . . . .	9
B.4.2 Heat Transfer Systems . . . . .	10
C. PCB WASTE ACTIVITY INVENTORY FOR JANUARY 1, 1989, TO FEBRUARY 5, 1990. . . . .	11
C.1 BEGINNING PCB WASTE INVENTORY JANUARY 1, 1989 . . . . .	11
C.1.1 Drummed PCB Liquid And Solid Wastes . . . . .	11
C.1.2 Bulk PCB Wastes. . . . .	25
C.1.3 Miscellaneous Equipment . . . . .	26
C.1.3.a PCB articles . . . . .	26
C.1.3.b PCB article containers . . . . .	27

TABLE OF CONTENTS (continued)

	<u>Page</u>
C.2 PCB WASTE GENERATED FROM JANUARY 1, 1989, TO FEBRUARY 5, 1990. . . . .	28
C.2.1 Drummed PCB Liquid And Solid Wastes . . . . .	28
C.2.2 Bulk PCB Wastes . . . . .	37
C.2.3 Miscellaneous Equipment . . . . .	38
C.2.3.a PCB articles . . . . .	38
C.2.3.b PCB article containers . . . . .	41
C.3 PCB WASTE SHIPPED FOR DISPOSAL FROM JANUARY 1, 1989, TO FEBRUARY 5, 1990 . . . . .	42
C.3.1 Drummed PCB Liquid And Solid Wastes . . . . .	42
C.3.2 Bulk PCB Wastes. . . . .	48
C.3.3 Miscellaneous Equipment . . . . .	50
C.3.3.a PCB articles . . . . .	50
C.3.3.b PCB article containers . . . . .	54
C.4 ENDING PCB WASTE INVENTORY AS OF FEBRUARY 5, 1990. . . . .	55
C.4.1 Drummed PCB Liquid And Solid Wastes . . . . .	55
C.4.2 Bulk PCB Wastes. . . . .	76
C.4.3 Miscellaneous Equipment . . . . .	78
C.4.3.a PCB articles . . . . .	78
C.4.3.b PCB article containers . . . . .	79

TABLE OF CONTENTS (continued)

C.5	PCB WASTE ACTIVITY GRAND SUMMARY . . . . .	81
C.5.1	Drummed PCB Liquid and Solid Wastes . . . . .	81
C.5.2	Bulk PCB Wastes. . . . .	81
C.5.3	Miscellaneous Equipment . . . . .	81
C.5.3.a	PCB articles . . . . .	81
C.5.3.b	PCB article containers . . . . .	81
APPENDIX:	SIGNED MANIFESTS AND CERTIFICATES OF DISPOSAL. . . . .	82

## APPENDIX C

### DOCUMENT APPROVAL CYCLE OF THE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

## APPENDIX C

### DOCUMENT APPROVAL CYCLE OF THE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

#### DOCUMENT APPROVAL CYCLE

##### Bostock to Spence

- Document begins with Initiator who requests Section Secretary to provide final form.
- Section Secretary completes and returns the following to the Initiator:
  - (a) original with attached Technical routing slip (white) and
  - (b) duplicate with attached Administrative routing slip (pink).
- The Section Secretary and the Initiator initial and date both route slips. The slips will indicate whether the document has been electronically edited (i.e., Grammatik).

#### THE NEXT TWO SECTIONS CONTAIN THE PARALLEL FLOW OF THE IDENTICAL PACKAGES

##### Technical

- The Technical package is forwarded to the Section Head for comments and concurrence by initialing and dating the route slip.
- The package is then forwarded to the Department Secretary for logging and routing to the following (as appropriate for the document) with each initialing and dating the route slip after redlining comments:
  - (a) C. C. Hill - comments and concurrence, and
  - (b) R. M. Keyser - comments and concurrence.
- The package is returned to the Department Secretary with a completed route slip at which time she will review the comments by Hill and Keyser and signify which comments belong to whom (by placing their initials adjacent to their comments). If incorporation of comments is necessary, the package will be returned to the Section Secretary/Initiator.

##### Administrative

- The Administrative package is forwarded to the Environment/Health Group Secretary (by the Department Secretary) for editing and concurrence by initialing and dating the route slip.
- The Administrative package is then returned to the Department Secretary for editing and concurrence by initialing and dating the route slip.
- If necessary, the Administrative package is then returned to the Section Secretary/Initiator with a completed route slip for incorporation of editing and/or technical comments.

## TECHNICAL AND ADMINISTRATIVE COMMENTS ARE INCORPORATED AT THIS POINT

- The initiator will review all comments and resolve any conflicts or open questions and negotiate with the commenter as necessary for changes. (The initiator will resubmit the corrected version to the appropriate commenter, if necessary.) The package is then returned to the Department Secretary as a final check to ensure that all corrections have been appropriately dispositioned.
- If no comments require correction to the document, the Department Secretary will affix and date the final, yellow route slip to identify that the package is ready for classification review. (All route slips from the review cycle are attached to the final package to show concurrence. Any "special instructions" concerning distribution should be included on the back of the route slips.

### Final Package

- After classification review, the final package is then forwarded to the Division Manager's office for concurrence. (Note: For documents not requiring Division Manager approval, the document can be distributed at this point.)
- Providing there are no more changes, the **complete** package is then forwarded to Bostock's office for signature. (Note: Unless otherwise noted, all enclosures must be present for Bostock's office to accept.)
- Unless otherwise noted, the signed package then is returned via courier to the 9116 copier/courier for distribution.
- All three route slips (white, pink, and yellow) should be retained by the Section Secretary for a six-month period for record purposes. (The file containing the completed route slips eventually will be purged.)

### Special Notes

- This system has been designed to eliminate duplication and iteration of corrections, thus saving time and effort.
- At no time should any one person make corrections to **both** packages during the dual cycle. (The dual cycle ends when the changes are incorporated and forwarded to the Department Secretary for the final, yellow route slip and classification review.)
- Though a technical review may note editorial corrections, it is the responsibility and purpose of the Administrative review to ensure proper format, style, and editing corrections. The technical review shall focus on content, intent, and clarity.
- To provide a more efficient tracking system, all concurrences should be dated.
- Please reference attached "11 + 1" chart for current flow diagram (Fig. C-1) and internal review document routing slips (Fig. C-2).

4-2-90

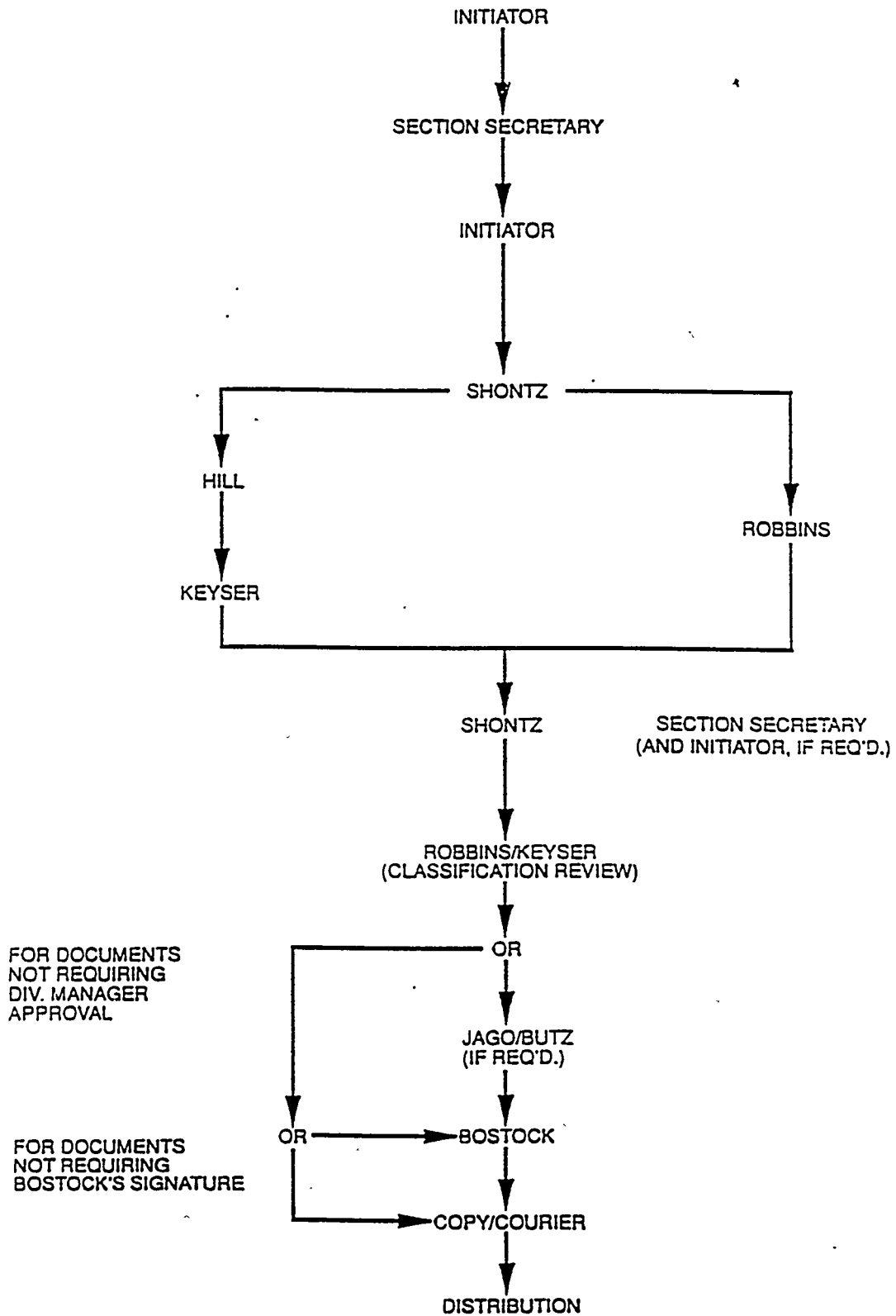


Fig. C-1. Flow diagram for technical and administrative document review.

[illegible]

<input type="checkbox"/> Your Approval	<input type="checkbox"/> Please Handle
<input type="checkbox"/> Your Comments	<input type="checkbox"/> Per Conversation
<input type="checkbox"/> Your File	<input type="checkbox"/> See Me
<input type="checkbox"/> Your Information	<input type="checkbox"/> Note and Return
<input type="checkbox"/> Initial and Pass On	<input type="checkbox"/> Destroy
<input type="checkbox"/> Prepare Reply for My Signature	<input type="checkbox"/> _____
<input type="checkbox"/> Prepare Report and Forward to this Office	<input type="checkbox"/> _____

REMARKS:

### SPECIAL INSTRUCTIONS

**FROM**

DATE \_\_\_\_\_

UCM-230  
112330 4-001

[illegible]

<input type="checkbox"/> Your Approval	<input type="checkbox"/> Please Handle
<input type="checkbox"/> Your Comments	<input type="checkbox"/> Per Conversation
<input type="checkbox"/> Your File	<input type="checkbox"/> See Me
<input type="checkbox"/> Your Information	<input type="checkbox"/> Note and Return
<input type="checkbox"/> Initialed and Pass On	<input type="checkbox"/> Destroy
<input type="checkbox"/> Prepare Reply for My Signature	
<input type="checkbox"/> Prepare Report and Forward to this Office	

REMARKS:

**FROM**

**LEAF**

UCM-230  
112226 4-63)

**C-5**

APPENDIX D

EXAMPLE OF WTSD ANNUAL PCB WASTE INVENTORY

# APPENDIX D

## EXAMPLE OF WTSD ANNUAL PCB WASTE INVENTORY

### C. PCB WASTE ACTIVITY INVENTORY FOR JANUARY 1, 1989, TO FEBRUARY 5, 1990

#### C.1 BEGINNING PCB WASTE INVENTORY JANUARY 1, 1989

##### C.1.1 Drummed PCB Liquid And Solid Wastes

OLD ID #	RAD CONT	CONTENTS DESCRIPTION	PCB LEVEL (PPM)	MASS (KGS)	DATE STORED	STORAGE LOCATION	WASTE CATEGORY
81-L-003	YES	HB OIL	UNKNOWN	84	05/11/81	9404-7	PCB LIQUID
81-L-015	YES	M-WING COOLANT	UNKNOWN	18	05/11/81	9404-7	PCB LIQUID
84-L-011	YES	DR 5992	UNKNOWN	129	04/24/84	9404-7	PCB LIQUID
84-L-045	YES	HB OIL	UNKNOWN	275	07/17/84	9720-9	PCB LIQUID
84-L-047	YES	HB OIL	UNKNOWN	275	07/17/84	9720-9	PCB LIQUID
84-L-055	YES	OIL	UNKNOWN	129	08/23/84	9720-9	PCB LIQUID
84-L-056	YES	PCB OILS FROM ANALY.	UNKNOWN	100	10/12/84	9404-7	PCB LIQUID
85-L-128	YES	PCB & MIN. OIL	UNKNOWN	300	09/06/85	9720-9	PCB LIQUID
85-L-131	YES	ST #46	7000	147	10/04/85	9720-9	PCB LIQUID
85-L-133	YES	ST #47	UNKNOWN	180	10/04/85	9720-9	PCB LIQUID
85-L-135	YES	ST #68	UNKNOWN	180	10/04/85	9720-9	PCB LIQUID
85-L-137	YES	ST #5669	UNKNOWN	180	10/04/85	9720-9	PCB LIQUID
85-L-138	YES	ST #52	UNKNOWN	180	10/04/85	9720-9	PCB LIQUID
85-L-140	YES	ST #8283	UNKNOWN	180	10/04/85	9720-9	PCB LIQUID
85-L-141	YES	ST #8266	UNKNOWN	180	10/04/85	9720-9	PCB LIQUID
85-L-148	YES	ST #8414	UNKNOWN	180	10/04/85	9720-9	PCB LIQUID
85-L-149	YES	ST #8404	UNKNOWN	180	10/04/85	9720-9	PCB LIQUID
85-L-151	YES	ST #8262	UNKNOWN	180	10/04/85	9720-9	PCB LIQUID
85-L-155	YES	ST #9227	UNKNOWN	226	10/04/85	9720-9	PCB LIQUID
85-L-156	YES	ST #8261	UNKNOWN	226	10/04/85	9720-9	PCB LIQUID
85-L-157	YES	ST #9229	UNKNOWN	226	10/04/85	9720-9	PCB LIQUID
85-L-158	YES	ST #9228	UNKNOWN	212	10/04/85	9720-9	PCB LIQUID
85-L-159	YES	ST #9085	UNKNOWN	180	10/04/85	9720-9	PCB LIQUID
85-L-160	YES	ST #9084	4	179	02/28/90	9720-9	PCB LIQUID
85-L-161	YES	ST #9225	UNKNOWN	180	10/04/85	9720-9	PCB LIQUID
85-L-162	YES	ST #9083	1000	172	10/04/85	9720-9	PCB LIQUID
85-L-166	YES	ST #9224	UNKNOWN	180	10/04/85	9720-9	PCB LIQUID
85-L-167	YES	ST #9082	UNKNOWN	180	10/04/85	9720-9	PCB LIQUID
86-L-061	YES	LIQUID	UNKNOWN	250	03/04/86	9720-9	PCB LIQUID
86-L-074	YES	PCB CONT. WATER	UNKNOWN	190	04/02/86	9720-9	PCB LIQUID
86-L-075	YES	PCB, SOLVENT, WATER	UNKNOWN	190	04/07/86	9720-9	PCB LIQUID
86-L-078	YES	ST 3991	UNKNOWN	180	04/25/86	9720-9	PCB LIQUID
86-L-079	YES	ST 6331&1498, 50% H2O	UNKNOWN	180	04/25/86	9720-9	PCB LIQUID
86-L-081	YES	ST 8330	UNKNOWN	180	04/25/86	9720-9	PCB LIQUID
86-L-082	YES	20% WATER	UNKNOWN	180	04/25/86	9720-9	PCB LIQUID
86-L-084	YES	80% WATER	UNKNOWN	180	04/25/86	9720-9	PCB LIQUID
86-L-086	YES	90% WATER	UNKNOWN	180	04/25/86	9720-9	PCB LIQUID
86-L-087	YES	ST 8146	740	147	04/25/86	9720-9	PCB LIQUID
86-L-091	YES	ST 6100, 40% WATER	84	179	04/26/86	9720-9	PCB LIQUID
86-L-093	YES	ST 3777&522, 50% WATER	UNKNOWN	180	04/25/86	9720-9	PCB LIQUID
86-L-094	YES	ST 5586	940	181	04/25/86	9720-9	PCB LIQUID
86-L-095	YES	ST PCB #16	UNKNOWN	126	04/25/86	9720-9	PCB LIQUID
86-L-096	YES	ST 6345	UNKNOWN	180	04/25/86	9720-9	PCB LIQUID
86-L-097	YES	ST 5585	770	179	10/25/86	9720-9	PCB LIQUID
86-L-098	YES	ST 6423, 60% WATER	290	176	10/04/85	9720-9	PCB LIQUID
86-L-100	YES	ST 8143	630	170	10/25/86	9720-9	PCB LIQUID
86-L-101	YES	ST 8145	UNKNOWN	180	04/25/86	9720-9	PCB LIQUID
86-L-102	YES	ST 6401, 60% WATER	UNKNOWN	165	10/25/86	9720-9	PCB LIQUID
86-L-103	YES	WATER	UNKNOWN	180	05/08/86	9720-9	PCB LIQUID
86-L-104	YES	WATER	UNKNOWN	180	05/08/86	9720-9	PCB LIQUID
86-L-138	YES	MIN. OIL, 1 PERC	UNKNOWN	250	05/14/86	LINE YARD	PCB LIQUID
86-L-162	YES	OIL/WATER H-2 PLENUM	UNKNOWN	113	07/24/86	9720-9	PCB LIQUID
86-L-163	YES	OIL/WATER H-2 PLENUM	UNKNOWN	250	07/24/86	9720-9	PCB LIQUID
86-L-164	YES	OIL/WATER H-2 PLENUM	UNKNOWN	250	07/24/86	9720-9	PCB LIQUID

### C.1.2 Bulk PCB Wastes

STORAGE TANK	RAD. CONT	CONTENTS DESCRIPTION	PCB LEVEL (PPM)	MASS (KGS)	DATE STORED
9418-9	No	Misc. Transformer Oil	300	34,000	06/88 to 12/88
004-W	Yes	Oil and Water From Burial Grounds	40	57,950	11/79
004-M	Yes	Y-12 Plant Waste Oil	720	29,650	01/80
009-F5	No	Misc. Oil and Water	>500	113,245	10/88
009-F4	Yes	Misc. Oil and Water	>500	3,175	10/88
009-F1	Yes	Misc. Oil and Water	>500	<u>1,587</u>	10/88

TOTAL BULK LIQUIDS.... 239,607

STORAGE LOCATION	RAD. CONT	CONTENTS DESCRIPTION	PCB LEVEL (PPM)	MASS (KGS)	DATE STORED
Oil Landfarm Storage Facility	YES	Soil from Remedial Actions in Oil Landfarm Areas	100 to 1700	465,306  <u>          </u>	11/88 and 12/88

TOTAL BULK SOLIDS.... 465,306

### C.1.3 Miscellaneous Equipment

#### C.1.3.a PCB articles

OLD ID #	RAD CONT	CONTENTS DESCRIPTION	PCB LEVEL (PPM)	MASS (KGS)	DATE STORED	STORAGE LOCATION	WASTE CATEGORY
NS-020	YES	VACUUM PUMP	UNKNOWN	181	03/28/88	9720-9	PCB ARTICLE
NS-021	YES	TRAP & PIPES	UNKNOWN	113	03/28/88	9720-9	PCB ARTICLE
NS-069	YES	VACUUM PUMP	UNKNOWN	544	03/28/88	9720-9	PCB ARTICLE
NS-115	YES	TANK	UNKNOWN	<u>138</u>	01/29/88	9720-9	PCB ARTICLE

TOTAL ARTICLES.... 976

# c.1.3.b PCB article containers

OLD ID #	RAD CONT	CONTENTS DESCRIPTION	PCB LEVEL (PPM)	MASS (KGS)	DATE STORED	STORAGE LOCATION	WASTE CATEGORY
81-S-001	YES	SMALL CAP.-YELLOW	ASKAREL	136	12/07/81	9404-7	PCB ARTICLE CONTAIN
83-S-048	YES	7 CAP. - YELLOW	ASKAREL	87	10/27/83	9404-7	PCB ARTICLE CONTAIN
83-S-053	YES	CAPS. LEAKERS-YELLOW	ASKAREL	88	06/17/82	9404-7	PCB ARTICLE CONTAIN
83-S-055	YES	8 CAP. - YELLOW	ASKAREL	240	10/27/83	9404-7	PCB ARTICLE CONTAIN
83-S-063	YES	5 CAP. - YELLOW	ASKAREL	150	07/08/83	9404-7	PCB ARTICLE CONTAIN
83-S-065	YES	4 CAP. - YELLOW	ASKAREL	120	07/08/83	9404-7	PCB ARTICLE CONTAIN
84-S-061	YES	PUMPS, PIPING, VALVES	UNKNOWN	113	07/18/84	9720-9	PCB ARTICLE CONTAIN
84-S-062	YES	PUMPS, PIPING, VALVES	UNKNOWN	113	07/18/84	9720-9	PCB ARTICLE CONTAIN
84-S-063	YES	PUMPS, PIPING, VALVES	UNKNOWN	90	07/18/84	9720-9	PCB ARTICLE CONTAIN
84-S-064	YES	PUMPS, PIPING, VALVES	UNKNOWN	263	07/18/84	9720-9	PCB ARTICLE CONTAIN
84-S-072	YES	PUMP, PIPE	UNKNOWN	126	07/18/84	9720-9	PCB ARTICLE CONTAIN
84-S-169	YES	4 PCB CAP. - YELLOW	UNKNOWN	102	04/02/90	9720-9	PCB ARTICLE CONTAIN
84-S-170	YES	4 PCB CAP. - YELLOW	UNKNOWN	108	04/02/90	9720-9	PCB ARTICLE CONTAIN
84-S-177	YES	3 PCB CAP. - YELLOW	UNKNOWN	111	04/02/90	9720-9	PCB ARTICLE CONTAIN
85-S-003	YES	4 PCB CAP. - YELLOW	UNKNOWN	130	02/15/85	9720-9	PCB ARTICLE CONTAIN
85-S-004	YES	4 PCB CAP. - YELLOW	UNKNOWN	65	02/15/85	9720-9	PCB ARTICLE CONTAIN
85-S-005	YES	4 PCB CAP. - YELLOW	UNKNOWN	90	02/15/85	9720-9	PCB ARTICLE CONTAIN
85-S-006	YES	4 PCB CAP. - YELLOW	UNKNOWN	90	02/15/85	9720-9	PCB ARTICLE CONTAIN
86-S-096	YES	PCB PIPE	UNKNOWN	147	03/13/86	9720-9	PCB ARTICLE CONTAIN
87-S-001	YES	LIGHT BALLASTS	UNKNOWN	125	12/10/86	9720-9	PCB ARTICLE CONTAIN
87-S-002	YES	LIGHT BALLASTS	UNKNOWN	125	12/10/86	9720-9	PCB ARTICLE CONTAIN
87-S-046	YES	HYARDSYSTEM PARTS	UNKNOWN	104	05/21/87	9720-9	PCB ARTICLE CONTAIN
87-S-065	YES	PCB HYARDEQUIP.	UNKNOWN	113	06/04/87	9720-9	PCB ARTICLE CONTAIN
87-S-081	YES	PCB HYARDEQUIP.	UNKNOWN	99	06/04/87	9720-9	PCB ARTICLE CONTAIN
87-S-084	YES	1 PCB CAP. NO TAG	UNKNOWN	150	04/28/87	9720-9	PCB ARTICLE CONTAIN
87-S-147	YES	U CONT. PIPING	UNKNOWN	68	07/27/87	9720-9	PCB ARTICLE CONTAIN
87-S-148	YES	U CONT. PIPING	UNKNOWN	43	02/27/87	9720-9	PCB ARTICLE CONTAIN
87-S-149	YES	U CONT. PIPING	UNKNOWN	102	07/27/87	9720-9	PCB ARTICLE CONTAIN
87-S-150	YES	U CONT. PIPING	UNKNOWN	158	05/27/87	9720-9	PCB ARTICLE CONTAIN
87-S-151	YES	U CONT. PIPING	UNKNOWN	117	05/27/87	9720-9	PCB ARTICLE CONTAIN
87-S-152	YES	U CONT. PIPING	UNKNOWN	120	07/27/87	9720-9	PCB ARTICLE CONTAIN
87-S-153	YES	U CONT. PIPING	UNKNOWN	150	07/27/87	9720-9	PCB ARTICLE CONTAIN
87-S-154	YES	U CONT. PIPING	UNKNOWN	52	07/27/87	9720-9	PCB ARTICLE CONTAIN
87-S-155	YES	U CONT. PIPING	UNKNOWN	43	07/27/87	9720-9	PCB ARTICLE CONTAIN
87-S-156	YES	U CONT. PIPING	UNKNOWN	124	07/20/87	9720-9	PCB ARTICLE CONTAIN
88-S-001	YES	LIGHTING BALLASTS	UNKNOWN	150	01/11/88	9720-9	PCB ARTICLE CONTAIN
88-S-002	YES	PCB BALLAST-BLUE TAG	UNKNOWN	100	03/03/88	9720-9	PCB ARTICLE CONTAIN

TOTAL ARTICLE CONTAINERS.... 4,312

APPENDIX E

EXAMPLE OF WTSD ANNUAL PCB WASTE GENERATED REPORT.

### EXAMPLE OF WTSD ANNUAL PCB WASTE GENERATED REPORT

### C.2.1 Drummed PCB Liquid And Solid Wastes

**E-2**

## C.2.2 Bulk PCB Wastes

STORAGE TANK	RAD CONT	CONTENTS DESCRIPTION	PCB LEVEL (PPM)	MASS (KGS)	DATE STORED
OD9-F5	No	Misc. Oil and Water	>500	11,973	01/89 - 06/89
OD9-F4	Yes	Misc. Oil and Water	>500	59,683	01/89 - 06/89
OD9-F4	Yes	Misc. Oil and Water	>500	51,428	06/89 - 02/90
OD9-F1	Yes	Misc. Oil and Water	>500	21,429	01/89 - 06/89
OD9-F1	Yes	Misc. Oil and Water	>500	81,746	06/89 - 02/90
9418-09	No	Misc. PCB Oil	160	2,000	01/89 - 06/89
9418-09	No	Misc. PCB Oil	290	<u>30,583</u>	06/89 - 02/90

258,842

-87,600 <sup>4</sup>

TOTAL BULK LIQUID..... 171,242

STORAGE LOCATION	RAD CONTENT	CONTENTS DESCRIPTION	PCB LEVEL (PPM)	MASS (KGS)	DATE STORED
Oil Landfarm Storage Facility	YES	Soil from Remedial Actions in Oil Landfarm Area	100 to 1700	171,429	01/89 and 02/89
Disposal Area Remedial Action Solid Storage Facility	YES	Soil from Remedial Actions in Bear Creek Burial Grounds, Ponds and Seep areas	<50 to 12,000	4,704,490	08/89 to 11/89

TOTAL BULK SOLIDS..... 4,875,919

<sup>4</sup> 87,600 kg of PCB liquid was added to OD9 tanks when OD4-W & OD4-M were emptied and dismantled.

## C.2.3 Miscellaneous Equipment

### C.2.3.a PCB articles

NEW ID #	OLD ID #	RAD CONT	CONTENTS DESCRIPTION	PCB LEVEL (PPM)	MASS (KGS)	DATE STORED	STORAGE LOCATION	WASTE CATEGORY
TT0001		NO	TRANSITION TANK	67	226	11/27/89	WETSA	PCB ARTICLE
TT0002		NO	TRANSITION TANK	67	226	11/27/89	WETSA	PCB ARTICLE
	13486	NO	POLE TRANSFORMER	<20	428	09/15/89	LINE YARD	PCB ARTICLE
	28729	NO	TRANSFORMER	710	453	09/29/89	WETSA	PCB ARTICLE
	28729	NO	TRANSFORMER	500	907	09/29/89	WETSA	PCB ARTICLE
	28729	NO	TRANSFORMER	550	45	09/29/89	WETSA	PCB ARTICLE
	29153	NO	CIRCUIT BREAKER	160	181	01/06/89	WETSA	PCB ARTICLE
	29153	NO	CIRCUIT BREAKER	140	181	01/06/89	WETSA	PCB ARTICLE
	29153	NO	CIRCUIT BREAKER	<50	181	01/06/89	WETSA	PCB ARTICLE
	29153	NO	CIRCUIT BREAKER	79	181	01/06/89	WETSA	PCB ARTICLE
	29153	NO	CIRCUIT BREAKER	94	181	01/06/89	WETSA	PCB ARTICLE
	29153	NO	CIRCUIT BREAKER	30	181	01/06/89	WETSA	PCB ARTICLE
	29153	NO	CIRCUIT BREAKER	160	181	01/06/89	WETSA	PCB ARTICLE
	29153	NO	CIRCUIT BREAKER	120	181	01/06/89	WETSA	PCB ARTICLE
	29153	NO	CIRCUIT BREAKER	120	181	01/06/89	WETSA	PCB ARTICLE
	29153	NO	CIRCUIT BREAKER	170	181	01/06/89	WETSA	PCB ARTICLE
	29153	NO	CIRCUIT BREAKER	<50	181	01/06/89	WETSA	PCB ARTICLE
	5238	NO	TRANSFORMER	61	1,866	09/14/89	LINE YARD	PCB ARTICLE
	5240	NO	POLE TRANSFORMER	DRY	34	09/14/89	LINE YARD	PCB ARTICLE
	5241	NO	POLE TRANSFORMER	DRY	62	09/14/89	LINE YARD	PCB ARTICLE
	5242	NO	POLE TRANSFORMER	<3	86	09/14/89	LINE YARD	PCB ARTICLE
	5244	NO	TRANSFORMER	DRY	79	09/14/89	LINE YARD	PCB ARTICLE
	5245	NO	TRANSFORMER	DRY	79	09/14/89	LINE YARD	PCB ARTICLE
	5247	NO	TRANSFORMER	170	385	09/14/89	WETSA	PCB ARTICLE
	5250	NO	POLE TRANSFORMER	<32	736	09/14/89	LINE YARD	PCB ARTICLE
06C28308		NO	TRANSFORMER	INT	16,780	02/08/89	LINE YARD	PCB ARTICLE
08C26543		NO	TRANSFORMER	ASK	2,460	01/01/89	LINE YARD	PCB ARTICLE
08C28218		NO	TRANSFORMER	INT	226	02/08/89	LINE YARD	PCB ARTICLE
10C26542		NO	TRANSFORMER	ASK	3,095	01/01/89	LINE YARD	PCB ARTICLE
11C26541		NO	TRANSFORMER	ASK	4,190	01/01/89	LINE YARD	PCB ARTICLE
11C37466		NO	TRANSFORMER	ASK	2,324	04/24/89	LINE YARD	PCB ARTICLE
13C26545		NO	TRANSFORMER	ASK	3,117	01/01/89	LINE YARD	PCB ARTICLE
13C34030		NO	TRANSFORMER	ASK	2,358	03/21/89	LINE YARD	PCB ARTICLE
13C42026		NO	TRANSFORMER	ASK	925	06/29/89	LINE YARD	PCB ARTICLE
14C41848		NO	TRANSFORMER	ASK	931	06/29/89	LINE YARD	PCB ARTICLE
18C28206		NO	TRANSFORMER	ASK	226	02/01/89	LINE YARD	PCB ARTICLE
20C39975		NO	TRANSFORMER	ASK	6,641	05/18/89	LINE YARD	PCB ARTICLE
21C28204		NO	TRANSFORMER	INT	17,668	02/01/89	LINE YARD	PCB ARTICLE
21C41844		NO	TRANSFORMER	ASK	907	06/29/89	LINE YARD	PCB ARTICLE
25057647	15392	NO	CIRCUIT BREAKER	5	181	01/06/89	WETSA	PCB ARTICLE
25057647	15397	NO	CIRCUIT BREAKER	630	181	05/24/89	WETSA	PCB ARTICLE
25057647	15397	NO	CIRCUIT BREAKER	84	181	05/24/89	WETSA	PCB ARTICLE
25057647	15397	NO	CIRCUIT BREAKER	15	181	05/24/89	WETSA	PCB ARTICLE
25057647	15397	NO	CIRCUIT BREAKER	17	181	05/24/89	WETSA	PCB ARTICLE
25057647	15397	NO	CIRCUIT BREAKER	49	181	05/24/89	WETSA	PCB ARTICLE
25057647	15397	NO	CIRCUIT BREAKER	27	181	05/24/89	WETSA	PCB ARTICLE
25057647	15397	NO	CIRCUIT BREAKER	5	181	05/24/89	WETSA	PCB ARTICLE
250580	13482	NO	POLE TRANSFORMER	<120	720	09/14/89	LINE YARD	PCB ARTICLE
250580	13483	NO	POLE TRANSFORMER	<50	624	09/14/89	LINE YARD	PCB ARTICLE
250580	13484	NO	POLE TRANSFORMER	<2	624	09/14/89	LINE YARD	PCB ARTICLE
250580	13485	NO	POLE TRANSFORMER	<25	624	09/15/89	LINE YARD	PCB ARTICLE
250580	13487	NO	POLE TRANSFORMER	<4	428	09/15/89	LINE YARD	PCB ARTICLE
250580	13488	NO	POLE TRANSFORMER	<4	428	09/15/89	LINE YARD	PCB ARTICLE
250580	13489	NO	POLE TRANSFORMER	<26	3	09/15/89	LINE YARD	PCB ARTICLE
250580	13490-1	NO	CIRCUIT BREAKER	<81	181	09/15/89	LINE YARD	PCB ARTICLE
250580	13490-2	NO	CIRCUIT BREAKER	<110	181	09/15/89	LINE YARD	PCB ARTICLE
250580	13490-3	NO	CIRCUIT BREAKER	<110	181	09/15/89	LINE YARD	PCB ARTICLE
250580	13490-4	NO	CIRCUIT BREAKER	<88	181	09/15/89	LINE YARD	PCB ARTICLE
250580	5239	NO	POLE TRANSFORMER	<2	32	09/14/89	LINE YARD	PCB ARTICLE

# C.2.3.b PCB article containers

NEW ID #	OLD ID #	RAD CONT	CONTENTS DESCRIPTION	PCB LEVEL (PPM)	MASS (KGS)	DATE STORED	STORAGE LOCATION	WASTE CATEGORY
	89/S/017	NO	8 CAPACITORS	UNKNOWN	181	09/29/89	9404-7	PCB ARTICLE CONTAINI
CS-005		YES	M-2 PUMP #261	UNKNOWN	102	01/26/90	9720-9	PCB ARTICLE CONTAINI
CS-022	026733	YES	METAL,PIPE	UNKNOWN	126	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-023	026733	YES	METAL,PIPE	UNKNOWN	124	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-024	026733	YES	PIPE	UNKNOWN	158	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-025	026733	YES	PIPE	UNKNOWN	136	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-026	026733	YES	PIPE	UNKNOWN	172	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-027	026733	YES	PIPE	UNKNOWN	147	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-028	026733	YES	PIPE	UNKNOWN	99	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-029	026733	YES	PIPE VALVES	UNKNOWN	79	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-030	026733	YES	PIPE VALVES	UNKNOWN	138	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-031	026733	YES	PIPE VALVES	UNKNOWN	136	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-032	026733	YES	PIPE VALVES	UNKNOWN	113	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-033	026733	YES	PIPE,HOSE	UNKNOWN	102	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-034	026735	YES	METAL,PIPE	UNKNOWN	122	04/11/89	9720-9	PCB ARTICLE CONTAINI
CS-035	031202	YES	METAL,PIPE	UNKNOWN	129	04/19/89	9720-9	PCB ARTICLE CONTAINI
NS-110	017917	YES	TRANSFORMERS	UNKNOWN	138	02/22/89	9720-9	PCB ARTICLE CONTAINI
NS-118	026733	YES	PIPING	UNKNOWN	133	03/27/89	9720-9	PCB ARTICLE CONTAINI
NS-119	026734	YES	PCB PIPING	UNKNOWN	566	04/04/89	9720-9	PCB ARTICLE CONTAINI
NS-120	026734	YES	PCB PIPING	UNKNOWN	1,455	04/04/89	9720-9	PCB ARTICLE CONTAINI
NS-121	026734	YES	PCB PIPING	UNKNOWN	680	04/04/89	9720-9	PCB ARTICLE CONTAINI
NS-143	069210	YES	CAPACITORS	UNKNOWN	104	03/02/89	9720-9	PCB ARTICLE CONTAINI
WTSO-89-0277	00034272	YES	RUBBER HOSE & FITTINGS	UNKNOWN	83	01/20/89	9404-7	PCB ARTICLE CONTAINI
WTSO-89-0277	00034272	YES	RUBBER HOSE & FITTINGS	UNKNOWN	86	01/20/89	9404-7	PCB ARTICLE CONTAINI
WTSO-89-0277	00034272	YES	RUBBER HOSE & FITTINGS	UNKNOWN	95	01/20/89	9404-7	PCB ARTICLE CONTAINI
WTSO-89-0277	00034272	YES	RUBBER HOSE & FITTINGS	UNKNOWN	79	01/20/89	9404-7	PCB ARTICLE CONTAINI

TOTAL ARTICLE CONTAINERS.... 5,483

APPENDIX F

EXAMPLE OF WTSD ANNUAL WASTE SHIPPED REPORT

## EXAMPLE OF WTSD ANNUAL WASTE SHIPPED REPORT

### C.3.1 Drummed PCB Liquid And Solid Wastes

F-2

### C.3.2 Bulk PCB Waste

STORAGE LOCATION	RAD CONT	CONTENTS DESCRIPTION	PCB LEVEL (PPM)	MASS (KGS)	DATE STORED	DATE SHIPPED	MANIFEST NUMBER	DESTINATION	DATE OF DISPOSAL
00-9-F5	NO	Waste PCB Oil & Water	1340	18,031	10/88	08/09/89	IL-04117364	CJM Chemical Services	08/15/89
00-9-F5	NO	Waste PCB Oil & Water	1340	16,626	10/88	08/09/89	IL-04117363	CJM Chemical Services	08/17/89
00-9-F5	NO	Waste PCB Oil & Water	1340	18,821	10/88	06/28/89	IL-04117362	CJM Chemical Services	07/13/89
00-9-F5	NO	Waste PCB Oil & Water	1340	19,184	10/88	07/06/89	IL-04117361	CJM Chemical Services	07/13/89
00-9-F5	NO	Waste PCB Oil & Water	1340	0		06/06/89	IL-04117357	CJM Chemical Services	5
00-9-F5	NO	Waste PCB Oil & Water	1340	0		06/07/89	IL-04117358	CJM Chemical Services	5
00-9-F5	NO	Waste PCB Oil & Water	1340	0		06/08/89	IL-04117359	CJM Chemical Services	5
00-9-F5	NO	Waste PCB Oil & Water	1340	18,694	10/88	06/27/89	IL-04117360	CJM Chemical Services	07/13/89
9418-09	NO	Waste PCB Oil	160	9,270	06/88	06/01/89	IL-04117356	CJM Chemical Services	06/05/89
9418-09	NO	Waste PCB Oil	160	12,907	06/88	06/01/89	IL-04117355	CJM Chemical Services	06/03/89
9418-09	NO	Waste PCB Oil	160	12,798	06/88	05/31/89	IL-04117352	CJM Chemical Services	06/02/89
9418-09	NO	Waste PCB Oil	290	16,181	01/89	12/04/89	TN-00019	ENSCO	12/31/89
9418-09	NO	Waste PCB Oil	290	12,363	01/89	12/05/89	TN-00020	ENSCO	12/31/89
00-9-F5	NO	Waste PCB Oil	1340	17,288	10/88	08/15/89	IL-04117366	CJM Chemical Services	08/19/89
00-9-F5	NO	Waste PCB Oil	1340	17,016	10/88	08/15/89	IL-04117365	CJM Chemical Services	08/19/89

TOTAL BULK LIQUIDS.... 189,179

<sup>5</sup> Wastes were not destroyed, but returned to T-12 while CJM disposed of dike waters at their facility.

### C.3.3 Miscellaneous Equipment

#### C.3.3.a PCB articles

NEW ID #	OLD ID #	RAD CONT	CONTENTS DESCRIPTION	PCB LEVEL (PPM)	MASS (KGS)	DATE STORED	STORAGE LOCATION	DATE SHIPPED	MANIFEST NUMBER	DEST	DISPOS DATE
	5241	NO	POLE TRANSFORMER	DRY	62	09/14/89	LINE YARD	11/28/89	TM-00018	ENSCO	02/01/
	5240	NO	POLE TRANSFORMER	DRY	34	09/14/89	LINE YARD	11/28/89	TM-00018	ENSCO	02/01/
	5242	NO	POLE TRANSFORMER	<3	86	09/14/89	LINE YARD	11/28/89	TM-00018	ENSCO	02/01/
	5244	NO	TRANSFORMER	DRY	79	09/14/89	LINE YARD	11/28/89	TM-00018	ENSCO	02/01/
	5245	NO	TRANSFORMER	DRY	79	09/14/89	LINE YARD	11/28/89	TM-00018	ENSCO	02/01/
	5238	NO	TRANSFORMER	61	1866	09/14/89	LINE YARD	11/28/89	TM-00018	ENSCO	02/01/
	13486	NO	POLE TRANSFORMER	<20	428	09/15/89	LINE YARD	11/28/89	TM-00018	ENSCO	02/01/
	5250	NO	POLE TRANSFORMER	<32	736	09/14/89	LINE YARD	11/28/89	TM-00018	ENSCO	02/01/
	29153	NO	CIRCUIT BREAKER	160	181	01/06/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
	29153	NO	CIRCUIT BREAKER	140	181	01/06/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
	29153	NO	CIRCUIT BREAKER	<50	181	01/06/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
	29153	NO	CIRCUIT BREAKER	79	181	01/06/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
	29153	NO	CIRCUIT BREAKER	94	181	01/06/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
	29153	NO	CIRCUIT BREAKER	30	181	01/06/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
	29153	NO	CIRCUIT BREAKER	160	181	01/06/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
	29153	NO	CIRCUIT BREAKER	120	181	01/06/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
	29153	NO	CIRCUIT BREAKER	120	181	01/06/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
	29153	NO	CIRCUIT BREAKER	170	181	01/06/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
	5247	NO	TRANSFORMER	170	385	09/14/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
	TT0001	NO	TRANSITION TANK	67	226	11/27/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
	TT0001	NO	TRANSITION TANK	67	226	11/27/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
	29153	NO	CIRCUIT BREAKER	<50	181	01/06/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
	28729	NO	TRANSFORMER	710	453	09/29/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
	28729	NO	TRANSFORMER	500	907	09/29/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
	28729	NO	TRANSFORMER	550	45	09/29/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
06C28308		NO	TRANSFORMER	INT.	16780	02/08/89	LINE YARD	02/08/89	15980	APTUS	04/03/
08C26543		NO	TRANSFORMER	ASK.	2460	01/01/89	LINE YARD	01/26/89	407JD	APTUS	02/23/
08C28218		NO	TRANSFORMER	INT	226	02/08/89	LINE YARD	02/08/89	15580	APTUS	03/06/
10C26542		NO	TRANSFORMER	ASK.	3095	01/01/89	LINE YARD	01/26/89	407JD	APTUS	02/23/
11C26541		NO	TRANSFORMER	ASK.	4190	01/01/89	LINE YARD	01/26/89	407JD	APTUS	02/23/
11C37466		NO	TRANSFORMER	ASK.	2324	04/24/89	LINE YARD	04/24/89	047LD	APTUS	05/17/
13C26545		NO	TRANSFORMER	ASK.	3117	01/01/89	LINE YARD	01/26/89	407JD	APTUS	02/23/
13C34030		NO	TRANSFORMER	ASK	2358	03/21/89	LINE YARD	03/21/89	15280	APTUS	04/04/
13C42026		NO	TRANSFORMER	ASK.	925	06/29/89	LINE YARD	06/29/89	684MM	APTUS	08/14/
14C41848		NO	TRANSFORMER	ASK.	931	06/29/89	LINE YARD	06/29/89	684MM	APTUS	08/14/
18C28206		NO	TRANSFORMER	ASK.	226	02/01/89	LINE YARD	02/08/89	15680	APTUS	03/08/
20C39975		NO	TRANSFORMER	ASK.	6641	05/18/89	LINE YARD	05/18/89	048LD	APTUS	05/31/
21C28204		NO	TRANSFORMER	INT.	17668	02/01/89	LINE YARD	02/08/89	15680	APTUS	03/08/
21C41844		NO	TRANSFORMER	ASK.	907	06/29/89	LINE YARD	06/29/89	684MM	APTUS	08/14/
25057647	15392	NO	CIRCUIT BREAKER	5	181	01/06/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
25057647	15397	NO	CIRCUIT BREAKER	630	181	05/24/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
25057647	15397	NO	CIRCUIT BREAKER	84	181	05/24/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
25057647	15397	NO	CIRCUIT BREAKER	15	181	05/24/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
25057647	15397	NO	CIRCUIT BREAKER	17	181	05/24/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
25057647	15397	NO	CIRCUIT BREAKER	49	181	05/24/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN
25057647	15397	NO	CIRCUIT BREAKER	27	181	05/24/89	WETSA	11/28/89	TM-00017	ENSCO	PENDIN

c.3.3.b PCB articles containers

NEW ID #	OLD ID #	RAD CONT	CONTENTS DESCRIPTION	PCB LEVEL (PPM)	MASS (KGS)	DATE STORED	STORAGE LOCATION	DATE SHIPPED	MANIFEST NUMBER	DEST	DISPOS/ DATE
	89/S/017	NO	8 CAPACITORS	UNKNOWN	181	09/29/89	9404-7	11/27/89	TX-00015	ENSCO	01/22/90

TOTAL ARTICLE CONTAINERS.... 181

APPENDIX G  
EXAMPLE OF WTSD ANNUAL ENDING PCB WASTE INVENTORY

# APPENDIX G

## EXAMPLE OF WTSD ANNUAL ENDING PCB WASTE INVENTORY

### C.4 ENDING PCB WASTE INVENTORY AS OF FEBRUARY 5, 1990

#### C.4.1 Drummed PCB Liquid And Solid Wastes

NEW ID #	OLD ID #	RAD CONTENTS CONT DESCRIPTION	PCB LEVEL (PPM)	MASS (KGS)	DATE STORED	STORAGE LOCATION	WASTE CATEGORY
A25551	011834	YES OIL	UNKNOWN	161	03/30/87	9720-9	PCB LIQUID
A27166	00002667	YES MOP WATER BUILD UP	UNKNOWN	190	02/14/89	9404-7	PCB LIQUID
A27528		YES LIQUID	500	192	09/09/89	9404-7	PCB LIQUID
A27719	029142	YES LIQUID	UNKNOWN	185	08/23/89	9720-9	PCB LIQUID
A27722		YES LIQUID	1650	195	09/09/89	9404-7	PCB LIQUID
A27724		YES LIQUID	584	174	09/09/89	9404-7	PCB LIQUID
A27780		YES LIQUID	50	181	09/09/89	9404-7	PCB LIQUID
A29380	023753	YES HYDRAULIC OIL		140	04/11/88	9720-9	PCB LIQUID
A29381	87-L-057	YES OIL	UNKNOWN	188	02/16/90	9720-9	PCB LIQUID
A29390	87-L-024	YES OIL	UNKNOWN	172	04/10/87	9720-9	PCB LIQUID
A29391	023753	YES HYDRAULIC OIL	63	192	04/11/88	9720-9	PCB LIQUID
A29392	09031	YES OIL	12	181	02/16/90	9720-9	PCB LIQUID
A29417	031676	YES LIQUID(DRUM)	2	147	12/28/87	9720-9	PCB LIQUID
A29448	87-L-005	YES CLEAN-UP WATER	3	174	03/25/88	9720-9	PCB LIQUID
A29449	013329	YES CLEAN-UP WATER(9204-4)	UNKNOWN	181	03/25/88	9720-9	PCB LIQUID
A29450	87-L-003	YES CLEAN-UP WATER	UNKNOWN	192	03/25/88	9720-9	PCB LIQUID
A29451	870L-004	YES CLEAN-UP WATER	UNKNOWN	197	03/25/88	9720-9	PCB LIQUID
A29457	09015	YES MINERAL OIL	14	188	01/29/88	9720-9	PCB LIQUID
A29458	023753	YES HYDRAULIC OIL	5	149	04/11/88	9720-9	PCB LIQUID
A29459	023753	YES HYDRAULIC OIL	25	154	04/11/88	9720-9	PCB LIQUID
A29460	09019	YES WATER,OIL	25	190	02/15/90	9720-9	PCB LIQUID
A29461	09018	YES WATER,OIL	10	167	02/15/90	9720-9	PCB LIQUID
A29462	09022	YES MINERAL OIL	UNKNOWN	172	01/29/88	9720-9	PCB LIQUID
A29463	023753	YES HYDRAULIC OIL	5	163	04/11/88	9720-9	PCB LIQUID
A29464	023753	YES HYDRAULIC OIL	5	158	04/11/88	9720-9	PCB LIQUID
A29465	023753	YES HYDRAULIC OIL	50	179	04/11/88	9720-9	PCB LIQUID
A29466	09023	YES WATER,OIL	15	163	02/15/90	9720-9	PCB LIQUID
A29467	09030	YES WATER,OIL	5	172	02/15/90	9720-9	PCB LIQUID
A29468	09001	YES HYDRAULIC OIL	20	172	05/12/88	9720-9	PCB LIQUID
A29469	09013	YES MINERAL OIL	15	185	01/27/88	9720-9	PCB LIQUID
A29470	09003	YES WATER,OIL	2	176	02/15/90	9720-9	PCB LIQUID
A29471	019938	YES Z-OIL	16	165	02/15/90	9720-9	PCB LIQUID
A29472	023753	YES HYDRAULIC OIL	5	145	04/11/88	9720-9	PCB LIQUID
A29473	023753	YES HYDRAULIC OIL	7	147	04/11/88	9720-9	PCB LIQUID
A29474	023753	YES HYDRAULIC OIL	UNKNOWN	170	04/11/88	9720-9	PCB LIQUID
A29475	09029	YES OIL	5	174	02/15/90	9720-9	PCB LIQUID
A29476	08995	YES OIL	9	179	02/15/90	9720-9	PCB LIQUID
A29477	08994	YES OIL	14	172	02/15/90	9720-9	PCB LIQUID
A29478	09002	YES HYDRAULIC OIL	2	170	04/11/88	9720-9	PCB LIQUID
A29479	08996	YES HYDRAULIC OIL	5	172	04/11/88	9720-9	PCB LIQUID
A29480	023753	YES HYDRAULIC OIL	7	163	04/11/88	9720-9	PCB LIQUID
A29481	023753	YES HYDRAULIC OIL	5	147	04/11/88	9720-9	PCB LIQUID
A29482	09021	YES OIL(MINERAL)	11	179	01/29/88	9720-9	PCB LIQUID
A29498	016175	YES WATER,OIL	6	167	12/22/88	9720-9	PCB LIQUID
A29499	016175	YES WATER,OIL	11	158	12/22/88	9720-9	PCB LIQUID
A29503	87-1645	YES OIL	UNKNOWN	167	02/16/90	9720-9	PCB LIQUID
A29504	09896	YES OIL	120	190	02/16/90	9720-9	PCB LIQUID

#### C.4.2 Bulk PCB Wastes

STORAGE TANK	RAD CONT	CONTENTS DESCRIPTION	PCB LEVEL (PPM)	MASS (KGS)	DATE STORED
CD9-F5	No	Misc. Oil and Water	1340	1,558 <sup>6</sup>	06/89
CD9-F4	Yes	Misc. Oil and Water	>500	114,286 <sup>7</sup>	10/88
CD9-F1	Yes	Misc. Oil and Water	>500	104,762 <sup>8</sup>	10/88
9418-09	No	Misc. PCB Oil	290	1,064 <sup>9</sup>	11/89

TOTAL BULK LIQUIDS..... 221,670

---

Using 8.25 as an average lb/gal for water/oil mixture.

<sup>7</sup> Using 7.00 as an average lb/gal for water/oil mixture.

<sup>8</sup> Using 7.00 as an average lb/gal for water/oil mixture.

<sup>9</sup> Using 7.35 as an average lb/gal for the oil. Using conventional methods this tank was pumped as empty as possible on 12-05-89.

C.4.2 Bulk PCB Wastes (cont.)

STORAGE LOCATION	RAD CONT	CONTENTS DESCRIPTION	PCB LEVEL (PPM)	MASS (KGS)	DATE STORED
Oil Landfarm Storage Facility	YES	Soil from Remedial Actions in Oil Landfarm Areas	1,700	636,735 <sup>10</sup>	11/88
Disposal Area Remedial Action Solid Storage Facility	YES	Soil from Remedial Actions in Bear Creek Burial Grounds, Ponds and Seep areas	12,000	4,704,490 <sup>10</sup>	08/89
TOTAL BULK SOLIDS.... 5,341,225					

<sup>10</sup> Using 100 as an average lb/ft<sup>3</sup> for soil.

### C.4.3 Miscellaneous Equipment

#### C.4.3.a PCB articles

NEW ID #	OLD ID #	RAD CONTENTS CONT DESCRIPTION	PCB LEVEL (PPM)	MASS (KGS)	DATE STORED	STORAGE LOCATION	WASTE CATEGORY
NS-020		YES 9215 VACUUM PUMP	UNKNOWN	181	03/28/88	9720-9	PCB ARTICLE
NS-021		YES 9215 TRAP & PIPES	UNKNOWN	113	03/28/88	9720-9	PCB ARTICLE
NS-069		YES 9215 VACUUM PUMP	UNKNOWN	544	03/28/88	9720-9	PCB ARTICLE
NS-115	022808	YES TANK	UNKNOWN	<del>138</del>	01/29/88	9720-9	PCB ARTICLE

TOTAL ARTICLES.... 976

# C.4.3.b PCB article containers

NEW ID #	OLD ID #	RAD CONT COMT	CONTENTS DESCRIPTION	PCB LEVEL (PPM)	MASS (KGS)	DATE STORED	STORAGE LOCATION	WASTE CATEGORY
CS-001		YES	PIPING (9215)	UNKNOWN	138	05/12/82	9720-9	PCB ARTICLE CONTAINI
CS-005		YES	M-2 PUMP #261	UNKNOWN	102	01/26/90	9720-9	PCB ARTICLE CONTAINI
CS-006	00012820	YES	PIPE POST,METAL	UNKNOWN	92	05/28/86	9404-7	PCB ARTICLE CONTAINI
CS-022	026733	YES	METAL,PIPE	UNKNOWN	126	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-023	026733	YES	METAL,PIPE	UNKNOWN	124	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-024	026733	YES	PIPE	UNKNOWN	158	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-025	026733	YES	PIPE	UNKNOWN	136	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-026	026733	YES	PIPE	UNKNOWN	172	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-027	026733	YES	PIPE	UNKNOWN	147	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-028	026733	YES	PIPE	UNKNOWN	99	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-029	026733	YES	PIPE VALVES	UNKNOWN	79	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-030	026733	YES	PIPE VALVES	UNKNOWN	138	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-031	026733	YES	PIPE VALVES	UNKNOWN	136	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-032	026733	YES	PIPE VALVES	UNKNOWN	113	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-033	026733	YES	PIPE,HOSE	UNKNOWN	102	03/27/89	9720-9	PCB ARTICLE CONTAINI
CS-034	026733	YES	METAL,PIPE	UNKNOWN	122	04/11/89	9720-9	PCB ARTICLE CONTAINI
CS-035	031202	YES	METAL,PIPE	UNKNOWN	129	04/19/89	9720-9	PCB ARTICLE CONTAINI
CS-038	09427	YES	PIPE	UNKNOWN	113	08/03/88	9720-9	PCB ARTICLE CONTAINI
CS-039	81-S-001	YES	ELECTRICAL PARTS	UNKNOWN	136	12/07/81	9404-7	PCB ARTICLE CONTAINI
CS-041	82-S-024	YES	PLASTIC HOSES	UNKNOWN	49	06/17/82	9404-7	PCB ARTICLE CONTAINI
CS-054	86-S-076	YES	PIPE	UNKNOWN	172	06/04/87	9720-9	PCB ARTICLE CONTAINI
CS-058	86-S-096	YES	PIPE,METAL	UNKNOWN	147	03/13/86	9720-9	PCB ARTICLE CONTAINI
CS-060	86-S-188	YES	PIPE POST	UNKNOWN	126	05/28/86	9404-7	PCB ARTICLE CONTAINI
CS-065	86-S-318	YES	METAL,PIPE	UNKNOWN	102	10/23/86	9720-9	PCB ARTICLE CONTAINI
CS-075	87-S-046	YES	PIPES,HOSE	UNKNOWN	104	05/21/87	9720-9	PCB ARTICLE CONTAINI
CS-081	87-S-065	YES	METAL,PIPE	UNKNOWN	113	06/04/87	9720-9	PCB ARTICLE CONTAINI
CS-088	87-S-081	YES	METAL,PIPE	UNKNOWN	99	06/04/87	9720-9	PCB ARTICLE CONTAINI
CS-092	87-S-147	YES	METAL,PLASTIC PIPE	UNKNOWN	68	07/27/87	9720-9	PCB ARTICLE CONTAINI
CS-094	87-S-149	YES	METAL,PIPE	UNKNOWN	102	07/27/87	9720-9	PCB ARTICLE CONTAINI
CS-095	87-S-150	YES	METAL,PIPE	UNKNOWN	158	05/27/87	9720-9	PCB ARTICLE CONTAINI
NS-110	017917	YES	TRANSFORMERS	UNKNOWN	138	02/22/89	9720-9	PCB ARTICLE CONTAINI
NS-118	026733	YES	PIPING	UNKNOWN	133	03/27/89	9720-9	PCB ARTICLE CONTAINI
NS-119	026734	YES	PCB PIPING	UNKNOWN	566	04/04/89	9720-9	PCB ARTICLE CONTAINI
NS-120	026734	YES	PCB PIPING	UNKNOWN	1,455	04/04/89	9720-9	PCB ARTICLE CONTAINI
NS-121	026734	YES	PCB PIPING	UNKNOWN	680	04/04/89	9720-9	PCB ARTICLE CONTAINI
NS-128	027705	YES	LIGHT BALLAST	UNKNOWN	129	08/08/88	9720-9	PCB ARTICLE CONTAINI
NS-134	034235	YES	FILTERS	UNKNOWN	90	08/15/89	9720-9	PCB ARTICLE CONTAINI
NS-135	034235	YES	FILTERS	UNKNOWN	97	08/15/89	9720-9	PCB ARTICLE CONTAINI
NS-136	034235	YES	FILTERS	UNKNOWN	88	08/15/89	9720-9	PCB ARTICLE CONTAINI
NS-137	034235	YES	FILTERS	UNKNOWN	90	08/15/89	9720-9	PCB ARTICLE CONTAINI
NS-138	034239	YES	FILTERS(CO1)	UNKNOWN	86	08/16/89	9720-9	PCB ARTICLE CONTAINI
NS-139	034239	YES	FILTERS	UNKNOWN	86	08/16/89	9720-9	PCB ARTICLE CONTAINI
NS-143	069210	YES	CAPACITORS	UNKNOWN	104	03/02/89	9720-9	PCB ARTICLE CONTAINI
NS-149	09020	YES	ELECTRICAL PARTS	UNKNOWN	124	04/02/90	9720-9	PCB ARTICLE CONTAINI
NS-155	84-S-072	YES	PUMP & PIPE	UNKNOWN	126	07/18/84	9720-9	PCB ARTICLE CONTAINI
NS-168	86-S-005	YES	TRANSFORMERS	UNKNOWN	129	02/15/86	9720-9	PCB ARTICLE CONTAINI
NS-190	87-S-156	YES	PIPING	UNKNOWN	124	07/20/87	9720-9	PCB ARTICLE CONTAINI
WTSO-89-0102	034244	YES	FILTERS(POND 1)	UNKNOWN	72	10/04/87	9720-9	PCB ARTICLE CONTAINI
WTSO-89-0102	034244	YES	FILTERS	UNKNOWN	120	10/04/87	9720-9	PCB ARTICLE CONTAINI
WTSO-89-0102	034244	YES	FILTERS	UNKNOWN	129	10/04/87	9720-9	PCB ARTICLE CONTAINI
WTSO-89-0102	034244	YES	FILTERS	UNKNOWN	95	10/04/87	9720-9	PCB ARTICLE CONTAINI

## APPENDIX H

### EXAMPLE OF ELECTRICAL MAINTENANCE DEPARTMENT ANNUAL BEGINNING PCB WASTE INVENTORY

## APPENDIX H

### EXAMPLE OF ELECTRICAL MAINTENANCE DEPARTMENT ANNUAL BEGINNING PCB WASTE INVENTORY

#### C.1.2 Bulk PCB Wastes

STORAGE TANK	RAD. CONT	CONTENTS DESCRIPTION	PCB LEVEL (PPM)	MASS (KGS)	DATE STORED
9418-9	No	Misc. Transformer Oil	300	34,000	06/88 to 12/88
004-W	Yes	Oil and Water From Burial Grounds	40	57,950	11/79
004-M	Yes	Y-12 Plant Waste Oil	720	29,650	01/80
009-F5	No	Misc. Oil and Water	>500	113,245	10/88
009-F4	Yes	Misc. Oil and Water	>500	3,175	10/88
009-F1	Yes	Misc. Oil and Water	>500	<u>1,587</u>	10/88

TOTAL BULK LIQUIDS.... 239,607

STORAGE LOCATION	RAD. CONT	CONTENTS DESCRIPTION	PCB LEVEL (PPM)	MASS (KGS)	DATE STORED
Oil Landfarm Storage Facility	YES	Soil from Remedial Actions in Oil Landfarm Areas	100 to 1700	465,306	11/88 and 12/88

TOTAL BULK SOLIDS.... 465,306

## APPENDIX I

### EXAMPLE OF ELECTRICAL MAINTENANCE DEPARTMENT ANNUAL WASTE GENERATED REPORT

## APPENDIX I

### EXAMPLE OF ELECTRICAL MAINTENANCE DEPARTMENT ANNUAL WASTE GENERATED REPORT

#### C.2.2 Bulk PCB Wastes

STORAGE TANK	RAD CONT	CONTENTS DESCRIPTION	PCB LEVEL (PPM)	MASS (KGS)	DATE STORED
OD9-F5	No	Misc. Oil and Water	>500	11,973	01/89 - 06/89
OD9-F4	Yes	Misc. Oil and Water	>500	59,683	01/89 - 06/89
OD9-F4	Yes	Misc. Oil and Water	>500	51,428	06/89 - 02/90
OD9-F1	Yes	Misc. Oil and Water	>500	21,429	01/89 - 06/89
OD9-F1	Yes	Misc. Oil and Water	>500	81,746	06/89 - 02/90
9418-09	No	Misc. PCB Oil	160	2,000	01/89 - 06/89
9418-09	No	Misc. PCB Oil	290	30,583	06/89 - 02/90

258,842  
-87,600<sup>4</sup>

TOTAL BULK LIQUID..... 171,242

STORAGE LOCATION	RAD CONTENT	CONTENTS DESCRIPTION	PCB LEVEL (PPM)	MASS (KGS)	DATE STORED
Oil Landfarm Storage Facility	YES	Soil from Remedial Actions in Oil Landfarm Areas	100 to 1700	171,429	01/89 and 02/89
Disposal Area Remedial Action Solid Storage Facility	YES	Soil from Remedial Actions in Bear Creek Burial Grounds, Ponds and Seep areas	<50 to 12,000	4,704,490	08/89 to 11/89

TOTAL BULK SOLIDS..... 4,875,919

<sup>4</sup> 87,600 kg of PCB liquid was added to OD9 tanks when OD4-W & OD4-M were emptied and dismantled.

APPENDIX J

EXAMPLE OF ELECTRICAL MAINTENANCE DEPARTMENT ANNUAL  
ENDING PCB WASTE INVENTORY REPORT

## APPENDIX J

### EXAMPLE OF ELECTRICAL MAINTENANCE DEPARTMENT ANNUAL ENDING PCB WASTE INVENTORY REPORT

#### C.4.2 Bulk PCB Wastes

STORAGE TANK	RAD CONT	CONTENTS DESCRIPTION	PCB LEVEL (PPM)	MASS (KGS)	DATE STORED
009-F3	No	Misc. Oil and Water	1340	1,558 <sup>5</sup>	06/89
009-F4	Yes	Misc. Oil and Water	>500	114,286 <sup>7</sup>	10/88
009-F1	Yes	Misc. Oil and Water	>500	104,762 <sup>8</sup>	10/88
9418-09	No	Misc. PCB Oil	290	1,064 <sup>9</sup>	11/89

TOTAL BULK LIQUIDS.... 221,670

---

Using 8.25 as an average lb/gal for water/oil mixture.

<sup>7</sup> Using 7.00 as an average lb/gal for water/oil mixture.

<sup>8</sup> Using 7.00 as an average lb/gal for water/oil mixture.

<sup>9</sup> Using 7.35 as an average lb/gal for the oil. Using conventional methods this tank was measured as empty as possible on 11/89 on

APPENDIX K  
EXAMPLE OF PCB TRANSFORMERS REPORT

## APPENDIX K

### EXAMPLE OF PCB TRANSFORMERS REPORT

#### B. PCBs AND PCB ITEMS IN SERVICE AS OF FEBRUARY 5, 1990

##### B.1 PCB TRANSFORMERS

##### B.1.1 Transformers In Service

TRANSFORMER NUMBER	BUILDING NUMBER	LOCATION	PCB LEVEL CONC.	CAPACITY (GAL)	MASS (KGS)	SERIAL NUMBER
752	9204-1	Inside, 1st floor South side	660 ppm	630	2,129	7235880

TOTAL TRANSFORMERS..... 2,129

APPENDIX L  
EXAMPLES OF CERTIFICATES OF DISPOSAL

APPENDIX L

EXAMPLES OF CERTIFICATES OF DISPOSAL

EPA ID #ILD0000672121  
ILL ID #0316000058



CWM  
CHEMICAL  
SERVICES

CERTIFICATE No 02670

## Certificate of Destruction

CWM Chemical Services, Inc. (formerly known as  
SCA Chemical Services, Inc.) hereby certifies that waste  
received from MARTIN MARIETTA ENERGY SYSTEMS

as identified on manifest number IL04117364  
has been incinerated and thereby destroyed as of this  
\_\_\_\_\_ day

of AUGUST 19 89

MARTIN MARIETTA ENERGY S

D.J. LOCKE

Generator BEAR CREEK ROAD

By O.A. OPERATIONS COORDINATOR

Address OAK RIDGE TN 37831

Contact J.T. FOUST



**CERTIFICATION**

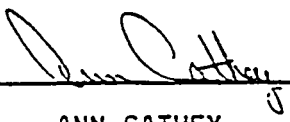
P.O. BOX 8513 333 EXECUTIVE COURT LITTLE ROCK, AR 72205 (501) 223-4160

**No.** 56232**CERTIFICATION OF COMPLIANCE AND DISPOSAL**

MARTIN MARIETTA-TN  
ACCOUNTS PAYABLE DEPT.  
P.O. BOX 2004  
OAK RIDGE, TN 37831-2004

ENSCO CERTIFIES THAT AS OF THE 31st OF DECEMBER  
1989, ALL MATERIAL RECEIVED FROM MARTIN MARIETTA-TN  
DESCRIBED ON ENSCO INVOICE NUMBER 31327, DATED 12/27/89  
ENSCO RECEIVING REPORT NUMBER (DELIVERY TICKET NUMBER) WB1- 31327  
AND MANIFEST NUMBER TN 20, WAS DISPOSED OF IN COMPLIANCE  
WITH ALL LOCAL, STATE, AND FEDERAL LAWS AND REGULATIONS.

ENSCO INCORPORATED

BY   
NAME ANN CATHEY  
TITLE WASTE TRACKING MANAGER  
DATE 2-23-90

SA2-11 /REV 3/881

March 19, 1990

Aptus  
Environmental Systems, Inc.  
P.O. Box 1000  
Columbia, S.C. 29202  
Tel: 803/733-1100  
Fax: 803/733-1100  
State Fax: 803/733-1100  
Columbia Fax: 803/733-1100  
Washington Fax: 803/733-1100


**APTUS**

**CERTIFICATE OF DISPOSAL**

NO. 11164

US DOE/c/o Martin Marietta  
Plant Y-12, P.O. Box Y  
Oak Ridge, TN 37830

THIS IS TO CERTIFY THAT THE HAZARDOUS SUBSTANCE  
MANIFESTED TO APTUS ON APTUS DOCUMENT # 045LD WAS  
DISPOSED OF IN ACCORDANCE WITH 40 CFR 761  
AS OF 03/07/90.

APTUS  
EPA ID # KSD980964993  
  
SHERI SANDERS  
PCB DOCUMENT ADMINISTRATOR

— A Westinghouse Company —

PAGE NO. 1

APT DOC # 045LD

DUE OF REON: 05/15/80  
DUE OF ORDIN. 05/27/80  
DISPOS. OPTION: 8.16 AM ON 05/15/80, PLEASE  
STAYING PLACE  
  
HOLD BACK 1

MANIFESTS ON AIR LINES ONLY  
 P.O. BOX 100, NEW YORK, N.Y.

APPENDIX M  
PCB SHIPMENT TELEPHONE LOG

## PCB SHIPMENT TELEPHONE LOG

[illegible]

**APPENDIX N**  
**BUILDING CONTACTS FOR PCB EQUIPMENT**

# APPENDIX N

## BUILDING CONTACTS FOR PCB EQUIPMENT

## BUILDING CONTACTS FOR PCB EQUIPMENT

<u>BUILDING</u>	<u>CONTACT</u>	<u>OFFICE</u>	<u>M.S.</u>	<u>PHONE</u>
9204-02	D J Merkel	9204-02	8129	4-2477
9998	T R Shope	9212	8192	4-6328
9202	S C Sterling	9202	8087	6-5278
9212	C H Fritts	9212	8197	4-0327
9204-03	J G Tracy	9204-03	8044	4-0425
9981	B M Rutherford	9981	8191	4-2397
9206	C E Sliski	9206	8123	4-2125
9616-3TK3	L Berry	9202	8094	4-0922
9813	L Berry	9202	8094	4-0922
9731	G A Gillis	9731	8174	6-4649
9201-02	L R Ballard	9201-02	8076	4-0130
9201-05	A K Johnson	9201-05	8159	6-7781

**APPENDIX O**  
**LIST OF LARGE PCB CAPACITORS**

## APPENDIX O

### LIST OF LARGE PCB CAPACITORS

#### B.3. LARGE PCB CAPACITORS

Building	On-Site as of 01/01/89	Number of Units removed as of 02/05/90	On-Site as of 02/05/90
9204-2	72	0	72
9998	111	0	111
9202	83	0	83
9212	18	0	18
9204-3	617	8	<u>609</u>
TOTAL CAPACITORS			893

**APPENDIX P**  
**MISCELLANEOUS SOURCES OF PCBs AND PCB ITEMS**

## APPENDIX P

### MISCELLANEOUS SOURCES OF PCBs AND PCB ITEMS

#### B.4 MISCELLANEOUS SOURCES OF PCBs AND PCB ITEMS

##### B.4.1 Hydraulic Systems

None <sup>2</sup>

##### B.4.2 Heat Transfer Systems

None <sup>3</sup>

---

<sup>2</sup> The Y-12 Plant has approximately nine hydraulic systems which contain quantities of PCBs less than 50 ppm.

<sup>3</sup> The Y-12 Plant has approximately nine heat transfer systems which contain quantities of PCBs less than 50 ppm.